

**82b.** The width of the upper opening **82b** is smaller than the cylinder **22**. The bottom side is increased in width, and this widened portion **82a** defines clearances with respect to the cylinder **22**. The cylinder storage groove **82** is configured to come into linear contact with the cylinder **22** at three portions at the maximum including the corners of the widened portion **82a** and the bottom.

[0100] The cylinder storage groove **83** is substantially formed into a triangular shape. In this case, the bottom corresponds to the bottom side of the triangle, and an upper opening **83b** corresponds to one apex. The width of the upper opening **83b** is smaller than the outer diameter of the cylinder **26**, and the width of the portion near the bottom side is larger than the cylinder **26**. The cylinder storage groove **83** is configured to define the clearance with respect to the cylinder **26**, and contact with the cylinder **26** at three portions at the maximum including the bottom and the inclined two side walls.

[0101] This syringe holder may be composed of the three cylinder storage grooves of the same type selected from the cylinder storage grooves **81**, **82** and **83**.

[0102] With the cylinder storage grooves **74a**, **74b**, **74c**, **81**, **82** and **83**, since the plurality of syringes **2**, **3** and **4** can be held in line, usability is improved, and time for manipulation may be reduced. Since the clearances are defined between the syringes **2**, **3** and **4** and the cylinder storage grooves **74a**, **74b**, **74c**, **81**, **82** and **83**, gas can easily run through during gas sterilization, so that sufficient sterilization is achieved.

[0103] Referring to the drawings, a fourth embodiment of the invention will be described. The same components as the above-described embodiments are represented by the same reference numerals. Description overlapped with the above-described embodiments will be omitted.

[0104] FIG. 13 shows a state in which a syringe **92** is stored in a plurality of recessed holding parts **91** of a syringe holder **90**.

[0105] The syringe **92** includes the cylinder **26**, which is provided with an indication **93** on the outer peripheral surface at a position shifted from the direction of extension of the flange **12c** by about 90° in the circumferential direction. In FIG. 13, the indication **93** includes a statement such as "For 15 mm balloon" or "15 mm". This indication means that this syringe **92** can expand the balloon **42** to a size corresponding to the expanded diameter of 15 mm at the maximum.

[0106] The holding part **91** of the syringe holder **90** differs from the holding part **61** in the second embodiment in the structure of a flange storage groove **94c**. As shown in FIG. 14, the flange storage groove **94c** includes a flat portion **95** as the bottom. The flat portion **95** is formed at a depth so that the flange **12c** does not come into tight-contact with the flat portion **95** but the flat portion **95** prevents the rotation of the flange **12c** when the syringe **92** is stored in the flange storage groove **94c**. With this flat portion **95**, movement in other directions, for example, the movement in the direction of extension of the flange **12c**, or the movement in the direction of the depth of the flange storage groove **94c** is allowed.

[0107] It is assumed that other holding parts, not shown, also have the flange storage grooves having the flat portions and are adapted to store other syringes so that the indications are visible.

[0108] Subsequently, the operation of the syringe holder **90** will be described.

[0109] The syringe **92** is inserted to the holding part **91** of the syringe holder **90** so that the indication **93** is faced upward. At this time, the orientation of the flange **12c** of the syringe **92** is constrained by the flat portion **95** of the flange storage groove **94c**, and the flange **12c** is kept substantially in the horizontal direction. The indication **93** of the syringe **92** can always be viewed from above.

[0110] When the operator wants to expand the balloon **42** to a size corresponding to 15 mm in diameter, the operator checks the respective indications **93** and selects the syringe **92** with the corresponding indication. After having held the distal portion of the syringe **92** and taken it out from the syringe holder **90**, the plunger **7** is pulled back to the proximal portion **26b** and connected to the balloon catheter **40**. When air is sent to the balloon **42** by the syringe **92**, the balloon **42** is expanded to a size corresponding to 15 mm in diameter.

[0111] Although not shown in the drawing, other syringes, for example, when the syringe having the indication **93** showing that the balloon **42** can be expanded to 11.5 mm in diameter is used, the balloon **42** is expanded to a size corresponding to 11.5 mm in diameter. When the holes **14** and **15** are provided on the cylinder **26**, a final diameter of the balloon **42** which can be expanded by the capacity from the distal portion **26a** of the cylinder **26** to the position where the holes **14** and **15** are formed is shown in the indication **93**.

[0112] In this embodiment, since the indication **93** is provided on the syringe **92** so that a rough standard of a size of the balloon **42** which can be expanded by the syringe **92** can be checked visually, selection of the syringe **92** can be performed smoothly, and the time for manipulation can be reduced.

[0113] Furthermore, since the flat portion **95** is provided in the flange storage groove **94c** of the holding part **91** so that the rotation of the syringe **92** in the stored state is prevented, the indication **93** can always be placed on the upper surface of the syringe set. Therefore, the contents of the indication **93** can easily be confirmed.

[0114] The effects of facilitating handling, improving reliability of sterilization, and reducing time for manipulation by the structure of storing and holding the plurality of syringes **92** are the same as in the above-described embodiments.

[0115] The invention is not limited to the above-described embodiments, and may be widely applied.

[0116] For example, it is also possible to provide the protrusions **65** (see FIG. 8) in the cylinder storage grooves **71**, **72** and **73** shown in FIG. 11 to further reduce the contact areas with respect to the cylinders.

[0117] It is also possible to provide the flat portion **95** (see FIG. 14) in the flange storage grooves **36a**, **36b** and **36c** of the syringe holders **5** and **70** in the first embodiment and the third embodiment.

[0118] While there has been shown and described what is considered to be preferred embodiments of the invention, it will, of course, be understood that various modifications and changes in form or detail could readily be made without